

## **MM4 - 1990 METEOROLOGY DATA**

To foster use of mesoscale meteorological (MM) data processed using Four Dimensional Data Assimilation (FDDA) in routine air pollution modeling assessments, a one-year meteorological data set for 1990 has been fabricated that spans the contiguous United States, southern Canada and northern Mexico. Hourly profiles of wind, temperature and moisture are provided at 23 levels in the atmosphere on an 80-km grid spacing. The Penn State mesoscale meteorological model (MM4) with FDDA was used in developing these data. These data reside on 12 CD-ROM's, and a graphical user interface extraction program is provided for easy extraction. This extraction program is provided on each CD but an update to the program is located on a floppy disk. The Readme file on the floppy disk should be read before starting.

There is a continuing need to improve the air pollution methods routinely being used in air pollution modeling assessments. There is also an awareness, that the newer air pollution transport, transformation and dispersion modeling methods can not show off their true potential unless an advanced characterization of the meteorological conditions is provided. Research is actively and rapidly advancing the capabilities of mesoscale meteorological processors employing FDDA. This 1990 data set is somewhat dated and is barely one year old. However, it still represents a significant advancement to meteorological characterizations employed in many current routine air pollution assessments.

These data are being made available to allow investigators to have access to this type of data that they might otherwise not have access to. It is our hope that this will stimulate investigations, exploring the strengths and weaknesses of these data in a variety of ways. It is also our hope that having access to such a 1-year data set will stimulate interest and foster "grass-roots" support calling for routine access to such data.

Additional sets of these data can be obtained from:

U.S. Department of Commerce  
National Climatic Data Center  
Federal Plaza  
151 Patton Avenue  
Asheville N.C. 28801-5001

Phone Customer Service at (704) 271-4800  
Charge: \$485.00 per data set